

To: Caporale, Cynthia[Caporale.Cynthia@epa.gov]
From: Hedrick, Elizabeth
Sent: Tue 2/25/2014 3:16:49 PM
Subject: RE: Fwd: MCHM fate and biotransformation proposal

Cindy,

GCWW is the Greater Cincinnati Water Works. They are down river from the Elk River (on the Ohio).
They shut down their intakes until the plume passed but collected and analyzed samples, and did for a

Ex. 5 - Deliberative

Will be in touch when I hear back from GCWW.

Elizabeth

Water Security Division

Office of Ground Water and Drinking Water

U.S. Environmental Protection Agency

26 West Martin Luther King Drive

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From: Caporale, Cynthia

Sent: Tuesday, February 25, 2014 7:59 AM
To: Hedrick, Elizabeth
Subject: RE: Fwd: MCHM fate and biotransformation proposal

Elizabeth,

Thank you for sharing.

Who is GCWW? We would be interested in the type of samples and the storage condition related to their observation of MCHM degradation. We had samples held for over a week and were still holding but we did not look for degradation products.

Currently a holding time study based on MCHM and PPH in hexane is being conducted by our lab and I have some preliminary results on that study if you are interested.

Cindy

Cynthia Caporale, Chief
OASQA Laboratory Branch
U.S. EPA Region III
Environmental Science Center
Fort Meade, MD
(410) 305-2732
Fax: (410) 305-3095

From: Hedrick, Elizabeth
Sent: Monday, February 24, 2014 2:07 PM

To: Caporale, Cynthia

Subject: FW: Fwd: MCHM fate and biotransformation proposal

I am passing this along as the proposal mentions the carboxylic acid (CA) of MCHM. It appears that other chemists are thinking along the same line. The proposal's authors do not have GC-MS (just FID) which I think might be a hindrance to elucidating structures. If you have lab folks still working on this it might be worth looking for the CA and developing a method for it (you can purchase the CA). The pKa will be much lower than for MCHM which could be used to optimize its extraction.

I have accumulated some articles on naphthenic acids. If you are interested, I can share them with you.

Ex. 5 - Deliberative

Thanks,

Elizabeth

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From: Allgeier, Steve
Sent: Monday, February 24, 2014 11:43 AM
To: Lindquist, Alan; Magnuson, Matthew; Hedrick, Elizabeth
Subject: FW: Fwd: MCHM fate and biotransformation proposal

Just FYI

From: Arguto, William
Sent: Monday, February 24, 2014 10:14 AM
To: Allgeier, Steve
Cc: binetti, victoria; Wisniewski, Patti-Kay
Subject: FW: Fwd: MCHM fate and biotransformation proposal

Steve – an FYI on USGS research

Bill

From: Kelly, Jack (R3 Phila.)
Sent: Monday, February 24, 2014 9:46 AM
To: Arguto, William; Wisniewski, Patti-Kay; binetti, victoria; Werner, Lora; Markiewicz, Karl; Helverson, Robert; Burns, Francis; Singhvi, Raj; Caporale, Cynthia
Cc: Linden, melissa; Matlock, Dennis; Smith, Art; Gilbert, John
Subject: Fw: Fwd: MCHM fate and biotransformation proposal

I can't review now just passing on for later discussion.

From: Matlock, Dennis
Sent: Monday, February 24, 2014 9:39:52 AM
To: Kelly, Jack (R3 Phila.)
Subject: Fw: Fwd: MCHM fate and biotransformation proposal

Jack fyi
Pass along as you like.
Thx
dennis

From: Dorsey, Mike H <Mike.H.Dorsey@wv.gov>
Sent: Monday, February 24, 2014 8:57:28 AM
To: Rusty; Matlock, Dennis
Subject: Fwd: MCHM fate and biotransformation proposal

FYI.

Sent from my iPhone

Begin forwarded message:

From: "Campbell, Patrick V" <Patrick.V.Campbell@wv.gov>
Date: February 24, 2014 at 8:55:52 AM EST
To: "Dorsey, Mike H" <Mike.H.Dorsey@wv.gov>, "Hickman, Joseph M" <Joseph.M.Hickman@wv.gov>
Cc: "Mandirola, Scott G" <Scott.G.Mandirola@wv.gov>
Subject: FW: MCHM fate and biotransformation proposal

Mike/Joe – looks like the USGS science guys have been doing some heavy thinking on mchm degradation. I've asked them for info on price and how qwik we could get some preliminary answers.

I'd be interested to know if this piques y'all's interest, or if you believe it is more of Freedom's problem.

One end product may be identification of bugs that like to eat mchm, or mchm-petroleum mixes. In the other places they've come up with a hungry bug mix, then had contractors deploy them as part of the cleanup.

From: Chambers, Douglas [<mailto:dbchambe@usgs.gov>]
Sent: Thursday, February 20, 2014 2:07 PM
To: Campbell, Patrick V; Wirts, John C
Subject: MCHM fate and biotransformation proposal

Pat, John,

When I was working in the Baltimore office over the past few years I became acquainted with the researchers on the Fate and Bioremediation Team there. These folks have been working on tracking the environmental fate and degradation of compounds at locations such as Aberdeen Proving Grounds and White Sands Missile Range. I spoke to them about the MCHM spill, just to get their take on the situation. After some thought they came up with the following. I felt it was worth passing along to you.

--

Douglas B. Chambers

Biologist/Water-Quality Specialist

USGS West Virginia Water Science Center

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